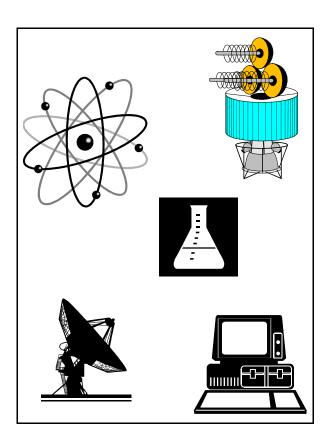


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SCIENCE AND TECHNOLOGY



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SCIENCE AND TECHNOLOGY

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COMPUTER CHRONICLES (1991)

With computers increasingly affecting all our lives, this series examines new computer products and their features.

Episode Synopsis

101 "COMPUTERS IN SPACE" 27 Minutes

Without computers, there would be no space program. Microcomputers give astronauts needed information and control, and give new intelligence to robot satellites and probes.

102 "DESKTOP PRESENTATION GRAPHICS" 27 Minutes

Apple Computer's Macintosh has always been a favorite of users looking for highquality graphics. This episode examines the latest Macintosh hardware and software packages designed for the business presentation market.

103 "SOFTWARE PIRACY" 27 Minutes

Half of the computer software in use today was illegally copied. This episode examines software piracy, reviewing the techniques software publishers are using to protect their products against copying and the devices being sold to help users overcome copy protection.

104 "COMPUTERS AND FITNESS" 27 Minutes

New computer hardware and software is providing health-conscious users with an innovative form of control and feedback. This episode looks at computerized exercise devices, diet and exercise software, and the use of computers in sports medicine.

105 "COMPUTERS AND THE LAW" 27 Minutes

Lawyers and laymen alike are turning to computer software to solve legal problems. No law office is complete without powerful, customized legal software systems, and even amateurs can buy off-the-shelf software for writing contracts, creating wills, and obtaining legal advice.

106 "LASER PRINTERS" 27 Minutes

When laser printers first entered the market, they were too expensive to have more than limited application. With a new generation of laser printers selling for under \$1,000, laser applications and their popularity with consumers are quickly growing.

107 "COMPUTERS AND ERGONOMICS" 27 Minutes

Millions of workers spend eight hours a day in front of a computer, using keyboards with outmoded designs, lighting meant for reading papers, and chairs designed for writing at desks. This episode looks at the ergonomic needs of computer users and problems associated with prolonged computer use, such as VDT radiation, eyestrain, and repetitive motion stress.

108 "DESKTOP VIDEO" 27 Minutes

Now that desktop publishing is common knowledge, the new buzzword in computer circles is "desktop video." The new multimedia capabilities of computers like Amiga, the Mac II, and even some new DOS machines are giving computer users the chance establish sophisticated desktop production operations.

109 "THE NEW LAPTOPS" 27 Minutes

With more and more computer users wanting to carry their computing power with them, laptop computers are the fastest-growing segment of the computer hardware business. Featured laptops include the IBM PS/2, the Macintosh, a new generation of pocket portables, and the first-ever color laptop.

110 "PALMTOP COMPUTERS" 27 Minutes

Portable computers have moved from the "luggable," to the laptop, and to the palmtop. This program features the new "wrist computer," which, in shades of Dick Tracy, hides the power of a computer chip in a wrist watch.

111 "THE GLOBAL SOFTWARE MARKET" 27 Minutes

Bill Gates of Microsoft and Phillipe Kahn of Borland discuss the increasing importance of international markets to U.S. software makers. The program also features the first-ever international software conference in Cannes, France.

112 "VIRUSES" 27 Minutes

Since computer users must be ever vigilant for computer viruses, anti-viral software has become a leading software category. This episode examines the virus threat and the ways users can protect their systems against viruses.

113 **"WINDOWS 3.0"** 27 Minutes

The release of this version of Windows by Microsoft pushed it into the forefront of DOS-based user interfaces. This program looks at the improvements in Widows 3.0 and compares it with other graphic user interface products.

114 "SPEECH TECHNOLOGY" 27 Minutes

Since speech is unquestionably the most natural user interface, the mouse of the future may very well be a microphone This episode discusses the latest technology in speech recognition and synthesis.

115 "CD-ROM SOFTWARE" 27 Minutes

The demand for mega storage has led to a maturing of interest in CD-ROMs as a standard storage device. This program examines the latest innovations in optical

storage technology.

116 "COMPUTERS AND MEDICAL CARE" 28 Minutes

Computer programmers and researchers have developed hardware and software to solve classic medical problems. This program looks at how computers are being used to replace and supplement physical and mental skill deficiencies that result from illness and accidents.

117 "SCANNERS" 28 Minutes

With increasing emphasis on graphic and picture-oriented communications, scanners are becoming as common a peripheral as modems. From low-cost portable scanners to powerful color desktop scanners, this program looks at hardware, software and applications.

118 "SOFTWARE IN SCHOOLS" 28 Minutes

The use of computers in schools is changing as teachers upgrade their old Apples and graduate to a new generation of educational hardware and software. This episode reviews the newest educational software for home and school use.

119 "FONT CITY" 27 Minutes

Word processors look more and more like desktop publishers, and laser printers are available at dot matrix prices. As a result, printing fonts have gained widespread importance. This episode reviews hardware and software products that add, modify, and manipulate fonts used for high-quality output.

120 **"PC NETWORK SECURITY"** 27 Minutes

With more PCs networked, files and data are becoming increasingly vulnerable to hackers. This program reviews various network security devices designed to assure the integrity of all users' information.

121 "FOREIGN LANGUAGE SOFTWARE" 28 Minutes

As the world shrinks and business becomes increasingly global, the need to communicate via computer in languages other than English is growing. This program examines foreign language font packages, translation software, language training software, and multi-lingual word processors.

122 "CONNECTIVITY" 28 Minutes

As system designers try to make computer systems emulate the human work environment, there is a new emphasis on communication among computers. Users are no longer satisfied with local area networks (LANs), but want to interconnect them,

creating wide area networks (WANs) around the world.

123 "GROUPWARE" 28 Minutes

Computer users want to work together, dynamically, the way they do without computers. This episode looks at a new generation of software that allows groups of users to work on a single project simultaneously.

124 "BUILD YOUR OWN PC" 28 Minutes

Personal computers today are often no more than combinations of off-the shelf modules like mother boards, cards, drives, keyboards, and displays. Not surprisingly, more computer buyers are choosing to custom-build their own PCs from component parts, which can be less expensive and guarantee the exact computer system they want. This segment examines options for the do-it-yourself computer shopper.

125 "COMPUTER VIDEO" 28 Minutes

The days of analog video are quickly fading as digital video takes over, and that means a computer can be both a video controller and a switcher. From Macintosh Quick Time to Amiga Vision, the long-predicted marriage of computers and video is here. This episode looks at new hardware and software technology being used to create video products.

126 "MIDI MUSIC" 28 Minutes

From country to classic, music has gone digital and musicians are now composing, arranging, and even performing at computer keyboards rather than at pianos. This episode reviews the latest hardware and software products for turning your computer into a music studio.

127 "COMDEX SPECIAL" 28 Minutes

This episode provides complete, on-location coverage of the world's largest computer show in Las Vegas, featuring product introduction and expert analysis.

128 "COMPUTER ART" 28 Minutes

Artists are trading in their brushes for computers. Computers have taken over the world of art and graphic design. This program examines how computers are used by commercial and creative artists, and reviews the latest hardware and software packages.

129 "COMPUTER ERGONOMICS" 28 Minutes

Computer use takes its toll on users' health. This program looks at the ergonomic needs of computer users and the potential physical problems related to computer use.

130 "ELECTRONIC PHOTOGRAPHY" 28 Minutes

Today, still cameras are recording pictures digitally so photographers can process, edit, and manipulate still photographs on computers direct from the camera. This program looks at new forms of electronic photography and videography.

131 "THE GLOBAL SOFTWARE MARKET" 28 Minutes

Computer software is one of America's greatest exports. In fact, the software industry depends on international sales for half its business. However, software development is becoming globalized, with applications and subroutines being written by programmers around the world. This program looks at the international face of software.

132 "A BEGINNERS GUIDE TO COMPUTERS" 28 Minutes

As prices have dropped, personal computers have become common household and office appliances. Although computers are no longer the exclusive domain of the hacker and gadgeteer, there is still considerable "computerphobia" among novices. This program is a basic primer for viewers new to computers.

133 "ELECTRONIC PUBLISHING" 28 Minutes

Imagine how many trees could be saved if newspapers, magazines, and books existed in electronic form. That is beginning to happen, as publishers increasingly turn to electronic publishing, the advent of which is redefining the meaning of reading and writing. This program looks at the technology and products of this fast-growing field.

134 "SECRETS OF WORDPERFECT" 28 Minutes

WordPerfect is by far the most commonly used business word processor. Through its many versions it has changed, improved, and become more like a mini-desktop publisher. This program looks at the new power of WordPerfect for old WordPerfect users, and gives a review of WordPerfect's major competitors.

135 "COMPUTER SPEECH" 28 Minutes

As computers and applications increasingly use speech as output, many analysts are arguing that speech is also the ultimate natural input. Compaq is now selling personal computers loaded with speech capability, and new Macintoshes come with built-in microphones. This episode reviews speech input and output for PC and Macintosh applications.

136 "CREATIVITY SOFTWARE" 28 Minutes

Computers can be used to write documents, create newsletters, manage budgets, and keep data files. But computers can also help people think better, thanks to a new generation of creativity software. This episode reviews the latest creativity software products.

137 **"SOFTWARE FROM THE MIDDLE EAST"** 28 Minutes

Motorola, Intel, Digital, IBM, and Microsoft all have something in common - they conduct major software development in the Middle East. Israel has a higher percentage of advanced engineering degree holders than any other country, and the most impressive ratio of

high-tech research and development expenditures to GNP of any nation in the world. It is therefore not surprising that American and Israeli companies are discovering the benefits of software design, development, and export from this vibrant Middle East nation. This program visits one of the world's fastest-growing software development centers.

138 "BASEBALL SOFTWARE" 28 Minutes

Baseball is America's national pastime, and one of the better sports for creating computer simulations. Now you can own, manage, coach, and even play on your own Major League teams with new computer games that are astonishing in their realism, thanks to fast processors, high resolution graphics, and digital sound. This program reviews the best baseball games for your computer.

139 "PERSONAL DIGITAL ASSISTANTS" 28 Minutes

Led by Apple's "Newton," major hardware companies are jumping into the market for personal digital assistants (PDAs). These "palmtop" devices have built-in intelligence, can interpret pen input, and offer wireless communications. This program reviews the newest technology in mobile computing.

140 "PENTIUM PC'S" 28 Minutes

Intel's latest CPU wonder is the Pentium processor, the next generation in computer chips. Many PC manufacturers are already offering Pentium models, and Pentium chips are showing up in other computation intensive machines such as printers, file servers, and scanners. This program looks at how fast the new Pentium PCs are.

141 **"DOS 6.O"** 28 Minutes

While windows is taking the PC world by storm, most IBM-compatible computers are still driven underneath by a DOS engine. The latest version of Microsoft's operating system includes many new features, such as a virus check, file compression, and improved memory management. This program reviews the newest DOS platforms.

142 "GLOBAL TECHNOLOGY" 28 Minutes

The United States leads the world in both hardware and software exports. Nevertheless, the world computer market is changing rapidly, with new kinds of users, industry convergence, strategic alliances, and the merger of media and technology.

This special episode shot on location at the European Technology Roundtable and Exhibition in Barcelona, Spain, features industry leaders like Bill Gates of Microsoft, Phillippe

Kahn of Borland, and Alan Ashton of WordPerfect, musing about the future of computer technology.

143 "INTERNET" 28 Minutes

Computer users from around the world are discovering the benefits of electronic gatherings, meeting on-line to exchange ideas and explore new technologies. This program looks at the new world of international dialogue.

144 "WINDOWS NT" 28 Minutes

Microsoft's Windows changed the entire face of personal computing, converting millions of computer users to the graphical user interface originally found only in the Macintosh. Now Microsoft is back with a powerful new version of Windows designed for high-powered network computing. This program reviews the features of Windows NT.

145 "CONSUMER BUYING GUIDE" 28 Minutes

The Computer Chronicles staff picks its favorite new hardware and software products as gift recommendations for the computer users on your holiday buying

146 "COMDEX SPECIAL" 28 Minutes

list.

This episode covers the annual fall Comdex show from Las Vegas, and features the newest computer products on display at the world's largest trade show.

147 "BUYING A NEW COMPUTER" 28 Minutes

With PC prices plummeting, more and more consumers are entering the market for their first personal computer. How do you decide what to buy? This program responds to the most common questions asked by new computer buyers, and serves as a guide to the computer novice.

148 "ELECTRONIC JOURNALISM" 28 Minutes

The paperless office may never be a reality, but it is possible we may be entering the era of near-paperless journalism. New on-line news sources, interactive television controls, and front-end software packages are changing the face of the news media. This programlooks at the new face of journalism.

149 "COLOR PRINTERS"28 Minutes

For years workers have been looking at color screens but printing black and white documents. Improved color printing technology and lower prices are changing this. This program presents a consumer's guide to color printers.

150 "INCOME TAX SOFTWARE" 28 Minutes

Many computer users say the most valuable use of their new PC is to prepare income tax returns. With an abundance of powerful, low-cost software, most taxpayers can now have a CPA in their CPU, and consequently do a much better job of managing their income tax liability. This program reviews the top tax programs and the personal finance packages that go with them.

151A "SCREEN SAVERS" 28 Minutes

As the personal computer industry matures, new product niches are born. One of the biggest new software categories is the "screen saver." From Star Trek characters to flying toasters, computer users are buying software that make normal computing more fun. This program looks at choices in creative ways to save your CRT.

151B "CLIP ART" 28 Minutes

As document creation evolves into desktop publishing and word processors add new layout functionality, computer users are increasingly communicating with pictures as well as words. This program reviews the various clip art collections on the market today.

152 "SMALL BUSINESS COMPUTING" 28 Minutes

Most small businesses have simple computer needs - word processing, accounting, client tracking, and other business functions. This program reviews the best software packages for the small business owner.

153 "SOFTWARE FOR KIDS" 28 Minutes

Children have taken to computers like ducks to water. In fact, many eight yearolds know more about computers than their parents and teachers. There is much great software available to keep young children fascinated with what a computer can do.

This program looks at the newest and most innovative computer programs for children.

154 "LANGUAGE TRANSLATION SOFTWARE" 28 Minutes

In an increasingly globalized world, it is valuable to be able to communicate in another language. In the past, that meant long hours of study or high bills for interpreters. Today, computers can do much of that work. This program examines the latest computer translation programs.

155 "LOCAL BUS VIDEO" 28 Minutes

As computers become more graphics oriented and as user interfaces like windows demand more from computer screens, microprocessors are having trouble keeping up with the processing demands of both the computer and the video display. The solution is local bus video that allows users to dedicate computer processing power to the graphics intensive display.

156 "ELECTRONIC MAIL (E-MAIL)" 28 Minutes

While we are still shuffling papers on our desks, electronic messaging is fast becoming standard for business communications. This program reviews the hardware and software you need to use E-Mail.

157 "MULTIMEDIA" 28 Minutes

Multimedia merges the dynamics of video and audio with the user control of personal computers, creating communications technology with amazing power and the personal control of print. This program focusses on Macintosh-based Multimedia products and Windows-based Multimedia applications.

158 "GROUPWARE" 28 Minutes

Business software often isolates the user. Computers have not made it easy for coworkers to share information the way they used to with paper and pencil. However, a

new breed of software called "groupware" gives users the power and control of a computer with the communications and sharing features of face-to-face work tools.

159 "FILE COMPRESSION" 28 Minutes

A few years ago computers were sold with twenty megabyte hard drives. Today, are computer games that take up thirty megabytes. Where can all this information be stored? One answer is file compression technology, which can save precious hard disk space by storing applications and data in shorthand. This program reviews various file compression technologies.

160 "BARGAIN SOFTWARE" 28 Minutes

Many high-end word processors, spreadsheets, and database managers cost hundreds of dollars. But most of the functionality is available at a tenth the price in low-cost generic software. This program looks at budget computer software.

161 "GREEN PCS" 28 Minutes

Today's PCs are equipped with energy-saving features and made with recycled materials. This program looks at the new "Green" PCs.

162 "COMPUTER BOWL VI - PART I" 28 Minutes

Each year the U.S. industry's top computer celebrities compete in a computer sponsored by *Computer Chronicles*, to see who knows the most computer trivia. This program features Bill Gates, Mitch Kapor, and the best minds in the computer business.

163 "COMPUTER BOWL VI - PART II" 28 Minutes

This program is a continuation of the annual computer masters trivia contest.

166 "ETRE SPECIAL" 28 Minutes

Shot on location at the European Technology Roundtable Exhibit in Barcelona, Spain, this episode examines innovative new computer products from the international community.

LIVING WITH HEALTH (1994)

contemporary health and wellness issues are examined in this 24-part telecourse. Each

half-hour episode focuses on one health topic, including cancer, cardiovascular disease, drugs, alcohol, smoking and aids.

EPISODE SYNOPSIS

101 "INVITATION TO HEALTH"

Presents a general overview of the five dimensions of health: emotional, intellectual, physical, social and spiritual. The program embraces the important aspects of a healthy lifestyle and personal health goals.

102 **"STRESS"**

Discusses the nature, sources and effects of stress, including the relationship between stress and disease. Stress management techniques are explored.

103 "EMOTIONAL HEALTH"

Offers insight into the importance of emotional health to the well-being of the individual. The nature of emotions, defense mechanisms, depression and anxiety are discussed. The student is also introduced to the characteristics of emotionally healthy people.

104 "INTELLECTUAL WELL BEING"

Introduces the cognitive dimension of the mind and demonstrates the interaction of the cognitive and effective dimensions. Self concept, self esteem and self efficacy are explained, and the problem-solving process is demonstrated.

105 "FITNESS AND EXERCISE"

Emphasizes the physical and mental benefits of exercise, the components of physical fitness and includes guidelines for beginning and continuing a personal fitness program. It distinguishes between skill-related exercise components and health related ones, and shows that one can be fit without being a skilled athlete.

106 "DIET AND NUTRITION"

Describes the components of good nutrition and a healthy diet. Discusses healthy menu planning, food choices and food preparation.

107 "WEIGHT MANAGEMENT"

Discusses weight, appearance and body composition. Healthy strategies for weight management, including the importance of exercise are explained. Extreme conditions such as anorexia nervosa and bulimia are included.

108 "REPRODUCTION AND SEXUAL HEALTH"

Discusses human reproduction in relation to individual and community health. Implications of the decision to have sexual relations and birth control are discussed. Fetal development, maternal health and birth are explored in this lesson.

109 "PARENTING"

Includes the decisions involved in having a child, parenting responsibilities, the health needs of children and the parent-child relationship. The special problems in child rearing, including single parenthood are included. The significant negative effect of child abuse is explored.

110 "COMMUNICABLE DISEASE"

Contains an overview of the changing patterns of disease, and how lifestyle, travel and medical progress relate to these patterns. The agent-host-environment model in relationship to infectious disease is explained as are the nature of infectious disease and immunity. The role of public health policies, immunization and good health practices in the control of disease is explained.

"AIDS AND SEXUALLY TRANSMITTED DISEASES"

Contains information about the major sexually transmitted diseases, including AIDs, causative organisms, symptoms, potential risks and treatment. While all STDs are covered, focus is on AIDs as one of the major health issues of our time, and the important measures to prevent the transmission of AIDs and other STDs.

112 "CARDIOVASCULAR DISEASE"

Teaches the cardiovascular system and its major diseases, including hypertension, atherosclerosis, hearth attack, stroke and others. Particular emphasis is placed on the lifestyle factors that increase the risk of cardiovascular disease.

113 "TREATMENT AND PREVENTION OF CARDIOVASCULAR DISEASE"

Discusses the importance of prompt treatment of cardiovascular diseases. Various treatment models are presented. The lifestyle factors important to lowering one's risks of cardiovascular disease are stressed.

114 **"CANCER"**

Presents an overview of the incidence and significance of cancer, what it is, how it develops, and how it is treated. The psychological, social aspects and risk factors are emphasized, as are warning signs and the importance of early diagnosis and treatment.

115 **"DRUGS"**

Explains the role of legal and illegal drugs (other than alcohol) in peoples lives. Types and actions of drugs, tolerance, dependence and addiction are discussed. Positive lifestyle alternatives to drug misuse and abuse are stressed.

116 "ALCOHOL"

Discusses the history of alcohol as the most used drug. It explains the effect of alcohol on the central nervous system and other systems of the body. The progression of alcohol abuse in an individual, the role of the family, and defenses used to deny the problems that sustain use are explored. Treatment options for alcohol abuse and the responsible use of alcohol are discussed.

117 **"TOBACCO"**

Explores the physiological, psychological and societal aspects of tobacco use. The effect of tobacco on the body and health risks to the smoker and to the non-smoker are explained. Various smoking cessation programs and the role of the government and agencies such as the American Lung Association are discussed.

118 "INJURY PREVENTION"

Examines accidents as the leading cause of death from birth to age 45. The lesson reviews the multiplicity of factors involved in accidents, identifies at-risk groups for various types of accidents, and discusses methods of injury prevention and control. Simple emergency care principles are included.

119 **"AGING"**

Teaches the aging process, theories of aging and changes that come about with aging. Health issues common to aging are included. The important aspects of maintaining one's health in later years are stressed. Also described are the ways in which we can improve the quality of life of aging family members, friends and ourselves.

120 "DEATH AND DYING"

Explores death as a normal part of the process of living. The lesson describes the views of death held by various cultures and people. The stages of acceptance of death through the views of a dying woman and her family are shown. Caring for the dying patient and then coping with grief are shared in this very intimate experience with death.

121 "HEALTH SELF CARE"

Presents an overview of the trend of health-activism — individuals becoming much more active in their own health care. The importance of taking more responsibility for one's own health care is explained, as are ways in which this is accomplished.

122 "ENVIRONMENTAL HEALTH"

Explores the impact that the environment has on the health of the individual, and the impact that the individual has on the environment. Also examined are the steps that individuals can take to protect and improve the environment for themselves and future generations.

"A CELEBRATION OF HEALTH"

Takes all the information presented and relates it to the individual in a very personal, almost interactive way. This is where "Living With Health" becomes the reality, where all the broad concepts integrate and become one's life.

124 "HEALTHCARE DELIVERY SYSTEMS"

Takes a broad-based look at the issues in health care in the United States. Ways in which to choose a health care provider, assess quality of health care and choose health insurance are discussed. The lesson also explores the "Patient's bill of Rights" as a tool for empowering patients to actively participate in their own health care.

LIFE IN THE UNIVERSE (1990)

This NASA series uses extensive archival photography to reappraise the history of space exploration.

Episode Synopsis

101 "THE INGREDIENTS OF SPACE TRAVEL" 28 Minutes

This episode describes how man has learned to live in space and examines the search for extraterrestrial life.

102 "BETWEEN ATOMS AND STARS" 30 Minutes

This episode describes NASA's Bio-Satellite project, which studies the effect of forces in space on living organisms.

103 "**ZERO-G**" 28 Minutes

This episode gives a detailed description of space suits and their function as a protective garment in the harsh environment of space, and looks at the effect of Zero-G on an astronaut and his craft.

104 "PROJECT MERCURY: AN EARLY STEP INTO SPACE" 29 Minutes This episode examines Project Mercury, America's first effort to put man into space.

105 "GEMINI SCIENCE" 29 Minutes

This episode discusses Project Gemini and America's efforts to land men on the Moon.

106 "LIFE ON THE MOON" 29 Minutes

This episode describes how lunar rocks and soil samples were tested for signs of life.

107 "OUR LABORATORIES IN SPACE" 28 Minutes

This episode examines man's first attempt at prolonged space flight, describing the operations of the prototype space station Skylab.

108 "EXAMINATION OF LIFE" 27 Minutes

This episode attempts to define "life" and its characteristics, and examines the probable origin of life on our planet.

109 "LIFE ELSEWHERE" 28 Minutes

This episode describe scientists' search beyond the Earth for life and its chemical

building blocks.

110 "LIFE ON THREE PLANETS BEYOND EARTH" 28 Minutes

This episode examines the possibilities of life on Venus, Mars, and Jupiter, and describes various life detection experiments conducted by NASA's Viking Mars Probe.

111 "UNIVERSE" 28 Minutes

This episode gives a general overview of the known Universe, examining the Sun, stars, galaxies, quasars, and pulsars.

112 **"POSSIBLE FUTURES IN SPACE"** 28 Minutes

This episode examines Einstein's and Hubble's theories of the Universe and looks at the many ideas advanced by scientists to monitor the Universe for signs of extraterrestrial life.

113 **"EXTRATERRESTRIALS?"** 29 Minutes

This concluding episode examines the possible existence and nature of extraterrestrial life.

NASA AT WORK (1992)

In the quarter century that astronauts have traveled beyond our planet's atmosphere, NASA has been at the forefront of their exploration. This breathtaking series, shot on location in outer space as well as on Earth, documents the amazing scientific discoveries and accomplishments of these 20th century pioneers.

Episode Synopsis

101 **"SHUTTLE PROFILE"** 27 Minutes

This episode documents the historic first flight of the Space Shuttle Columbia, including its on-board activities and landing on Roger's Dry Lake in California.

102 "UNIVERSE" 27 Minutes

This episode explores the almost inconceivable extremes of size and time from galaxies to sub-atomic particles, and from light years to micro-cosmic events that endure for only a billionth of a second.

103 "SPACE FOR WOMEN" 27 Minutes

This episode examines an outstanding group of NASA women working as astronauts, mission specialists, engineers, and technicians.

104 "JPL PROFILE" 27 Minutes

This episode describes the activities and mission of California's Jet Propulsion Laboratory.

105 "THE WORLD FROM SPACE" 27 Minutes

This episode describes the operation of the Landsat Observation Satellite and explains how the space shuttle can provide information for weather researchers.

More than 50 aspects of science and technology are examined in this 26-part series that is a comprehensive and fascinating way to unlock the mysteries of science. Topics covered in the half-hour episodes range from volcanoes to rocket telemetry to human evolution.

EPISODE SYNOPSIS

101 "VOLCANOES AND GLACIERS"

Majestic and powerful volcanoes effect climatic changes, while silent, icy glaciers alter the landscape and control ocean levels.

102 "MOVING OVER LAND AND WATER"

Transportation has evolved from dragging and carrying loads to the development of motorized vehicles; meanwhile, man was slow to see the value of water in transporting objects.

103 "SPECTACLES IN THE SKY"

The earth's atmosphere is the blanket of air in which humans live, and through which they observe celestial displays such as comets' trails and the Northern Lights.

104 "ORIGIN OF LIFE"

The first life forms emerged - and survived - in the hostile environment of earth at a time when it was still a developing planet.

105 "THE STORY OF BLOOD AND DNA"

The human structure is partly determined by the function of blood and the microscopic organic compounds in genes.

106 "THE SUN - SOURCE OF HEAT AND LIGHT"

The nature of the light which the sun emits supplies our planet with the heat and energy needed for survival.

107 "THE ANIMAL KINGDOM AND INSECTS"

Millions of insects challenge human domination of the earth, while a wide variety of animals have adapted to the changing planetary conditions.

108 "EARTH'S CLIMATE EXTREMES"

The ice never melts in Antarctica, but life is warm and vegetation flourishes in the tropics.

109 "SOURCES OF ENERGY"

The atom, the earth's smallest particle, can generate awesome nuclear energy.

110 "SPACE TRAVEL AND MOON CONQUEST"

Relive the thrill of man's first landing on the moon.

111 "EXPLORING THE OUTER LIMITS"

Technology is now able to penetrate the mysteries of distant stars and other galaxies at the outer limits of our solar system.

112 "OUR PLANET AT RISK"

The balance of nature and the delicacy of the environment are being threatened by man's own indiscriminate pollution.

113 "THREATS TO EARTH'S SURVIVAL"

The earth may seem indestructible, but human contamination and violent upheavals from earth's molten core are threats to survival.

114 "THE WORLD BENEATH THE WAVES"

Researchers delve below the surface of the ocean to study the marine life existing in the mysterious environment.

115 "EARTH'S DRIVING FORCES"

The force which causes motion is explained, together with the principles of electricity, both of which provide earth with a large portion of energy.

116 "AIRBORNE TRAFFIC"

Discover how a heavy machine can not only transport great quantities of material, but move great distances through the air.

117 "THE MYSTERY OF MOTION"

Explore the physical aspects of motion, on which the world's existence depends, and the basic laws by which motion is governed.

118 "SEEING THINGS MORE CLEARLY"

The human eye needs help to see distant things clearly and to make a permanent record of what it has seen.

119 "HORSEPOWER FROM FOSSILS"

The origin of petroleum, on which society depends, is examined, together with an explanation of how oil products power the internal combustion engine.

120 "EVOLUTION OF MAN"

It is a long way from a one-celled living organism to a complex animal like a human being.

121 "THE MIRACLE OF SIGHT"

The human brain, which controls what we see and do, is the world's most complex computer.

122 "THE WORLD OF PLANTS AND BEES"

Bees have developed an amazingly complex society, one which is examined in relationship to the world of plants.

123 "PICTURE THROUGH THE AIR"

The technology of communication has been revolutionized by satellite transmission of television signals.

124 "CELLS AND VIRUSES"

The body is a composite of millions of cells, which are studied close up, along with the viruses which are a constant menace to health.

125 "ORDER AND THE UNIVERSE"

Billions of entities in the universe, including our own solar system, are regulated by physical forces which prevent universal chaos.

126 "FROM CAVE WALLS TO COMPUTERS"

The written word, crucial to the process of civilization, can be traced to early cave drawings.